DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-009290

Address: 333 Burma Road **Date Inspected:** 23-Sep-2009

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 645 **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Xu Xian Ping No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

OBG & TOWER Components **Bridge No:** 34-0006 **Component:**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

BAY 2

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #054 located on Floor Beam FB3090 – 001. Welder is identified as 045203. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U4b - F.

FCAW process welding of weld joint #010 located on Floor Beam FB3090 – 001. Welder is identified as 045203. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132 - 3.

FCAW process welding of weld joint #024 located on Floor Beam FB3090 – 001. Welder is identified as 045203. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2133.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

BAY 3

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #012 located on Longitudinal Diaphragm LD010 – 009. Welder is identified as 206623. ZPMC QC is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – P4 – F.

FCAW process welding of weld joint #005 located on Longitudinal Diaphragm LD001 - 042. Welder is identified as 208035. ZPMC QC is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132 - 3.

FCAW process welding of weld joint #008 located on Longitudinal Diaphragm LD010 – 009. Welder is identified as 206623. ZPMC QC is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

FCAW process welding of weld joint #012 located on Longitudinal Diaphragm LD001 – 042. Welder is identified as 208035. ZPMC QC is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – P4 – F.

BAY 5

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #002 located on Traveler Rail 11TR3 - 005. Welder is identified as 066064. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2231 - B - U2 - F.

FCAW process welding of weld joint #001 located on Traveler Rail Bracket TR2A – PP060. Welder is identified as 053742. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

FCAW process welding of weld joint #003 located on Traveler Rail 10TR1 - 027. Welder is identified as 068858. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2231 - B - U2 - F.

FCAW process welding of weld joint #003 located on Traveler Rail Bracket TR1B - PP091. Welder is identified as 053742. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2232 - Tc - U4c - F.

BAY 6

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. DP3039 – 001 – 003~008; 035; 036 – Green Tag # 10635

a. SA6017 – 001 – 005; 006

This QA Inspector observed the following work in progress:

TOWER

SMAW process welding of weld joint #10A located on WD1 – A305 – 65M – 4. Welder is identified as 049769. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the WPS - 345 - SMAW - 2G (2F) FCM - Repair.

SMAW process welding of weld joint #1B located on ND1 – SA658 – 65M – 12. Welder is identified as 067707. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the WPS - 485 - SMAW - 1G (1F) FCM - Repair - 1.

SMAW process welding of weld joint #9B located on WD1 – A305 – 77M – 4. Welder is identified as 048659. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the WPS - 345 - SMAW - 2G (2F) FCM - Repair.

SMAW process welding of weld joint #1B located on ND1 – SA658 – 65M – 8. Welder is identified as 053753. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the WPS - 485 - SMAW - 1G (1F) FCM - Repair - 1.

Cross Beam - 8

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #002 located on Cross Beam CB202A – 008. Welder is identified as 220064. ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2231 - B - U2 - F.

FCAW process welding of weld joint #035 located on Floor Beam FB205 – 018. Welder is identified as 048625. ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2231 - B - U2 - F.

FCAW process welding of weld joint #005 located on Cross Beam CB202A – 008. Welder is identified as 220066. ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U4b - F.

FCAW process welding of weld joint #035 located on Floor Beam FB205 – 020. Welder is identified as 048625.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2231 - B - U2 - F.

Cross Beam – 9

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #049 located on Floor Beam FB204 – 022. Welder is identified as 220688. ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - B - U2 - F.

FCAW process welding of weld joint #036 located on Floor Beam FB205 – 024. Welder is identified as 053609. ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2233 - B - U2 - F.

FCAW process welding of weld joint #058 located on Floor Beam FB204 – 023. Welder is identified as 220688. ZPMC QC is identified as Liu Chuan Gang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - B - U2 - F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar, Sandeep	Quality Assurance Inspector
Reviewed By:	Whitehead, Lonnie	QA Reviewer